

Claims

1. A microemulsion comprising at least the following components:

- 5 (A) 0.5 to 70 % by weight of alkanolammonium salts of the alkylsulfates and/or alkylpolyalkyleneglycoethersulfates having the following structure



wherein

- 10 R^1 = is a C_8 - to C_{20} -hydrocarbon radical,
 p = is an integer from 2 to 5, where p can be different for each m ,
 R^2 = is H, a C_1 - to C_6 -alkyl or a C_2 - to C_4 -hydroxyalkyl,
 R^3 = is H, a C_1 - to C_6 -alkyl or a C_2 - to C_4 -hydroxyalkyl,
15 R^4 = is a C_2 - to C_4 -hydroxyalkyl, and
 m = is an integer from 0 to 7,
or mixtures thereof,

- (B) 20 to 95 % by weight of water,
(C) 0.1 to 20 % by weight of one or more oil component(s), and
20 (D) 0.1 to 20 % by weight of one or more mono- or polyhydroxy C_2 - to C_{24} -alcohol(s), and
(E.1) 0.1 to 15 % by weight of one or more UV filter(s) and/or
(E.2) 0.1 to 3 % by weight of one or more antidandruff substance(s),
each percentage hereof based on the total composition.

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2. A microemulsion according to claim 1,

characterized in that the UV filter(s) is (are) chosen from among the group of 3-benzylidenecamphor and its derivatives, 4-aminobenzoic acid derivatives, cinnamic acid esters, salicylic acid esters, benzophenone derivatives,
30 benzalmalonic acid esters, triazine derivatives, propane-1,3-diones, phenylbenzimidazolsulfonic acid and the salts thereof, sulfonic acid derivatives of benzophenone, sulfonic acid derivatives of 3-benzylidene camphor, 4-aminobenzoic acid derivatives, and finely dispersed metal oxides or salts.

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3. A microemulsion according to any one of the preceding claims, characterized in that the UV filter (E.1) is one or more of the following substances: octocrylenes, 4-methoxycinnamic acid-2-ethylhexyl ester, 2-

phenylbenzimidazol-5-sulfonic acid, 2-hydroxy-4-methoxybenzophenone sulfonic acid, and 4-bis(polyethoxy)paraminobenzoic acid polyethoxyethyl ester, and mixtures thereof.

- 5 4. A microemulsion according to claim 1,
characterized in that the antidandruff substance (E.2) is one or more of the
following substances: 1-(4-chlorophenoxy-1-(1-H-imidazol-1-yl)-3,3-di-
methyl-2-butanone, 3-aminopyridine, and the compound composed of 2-
aminoethanol and 1-hydroxy-4-methyl-6-(2,4,4-trimethylpentyl)-2(1H)-
10 pyridone.
5. A microemulsion according to claim 1,
characterized in that the alkanolammonium salts of the alkylsulfates and/or
alkylpolyalkyleneglycol ethersulfates have independently of one another the
15 following residues or indices:

$$\begin{aligned} R^1 &= \text{a linear or saturated } C_{12}\text{- to } C_{16}\text{-alkyl residue,} \\ p &= 2 \text{ or } 3, \text{ where } p \text{ may be different for each } m, \\ R^2 &= \text{H or hydroxyisopropyl,} \\ R^3 &= \text{H or hydroxyisopropyl,} \\ 20 \quad R^4 &= \text{hydroxyisopropyl and/or} \\ m &= \text{an integer from 0 to 2.} \end{aligned}$$
6. A microemulsion according to any one of the preceding claims, wherein the
microemulsion contains
25 2 to 60 % by weight of component (A)
30 to 80 % by weight of component (B)
0.5 to 15% by weight of component (C) and/or
0.1 to 9 % by weight of component (D).
- 30 7. A microemulsion according to any one of the preceding claims, wherein the
microemulsion also contains at least one of the following components:
(F) greater than 0 to 20 % by weight of one or more additional surfactant(s)
or emulsifier(s),
and optionally also
35 (G) greater than 0 to 20 % by weight of one or more electrolyte(s), and
(H) greater than 0 to 10 % by weight of one or more additive(s).

8. A microemulsion according to claim 7 containing at least the following component:
 (F) at least 1 % by weight of a product obtained by the alkoxylation of triglycerides, which is esterified, wholly or in part, with C₆- to C₂₂-fatty acids, wherein preferably 2 to 40 moles of alkoxylation agent are employed per mole of triglyceride.
9. A microemulsion according to any one of the preceding claims, wherein the oil component (C) contains one or more component(s) chosen from the group of lecithins, mono-, di-, and/or triglycerides of saturated and/or unsaturated, branched and/or linear carboxylic acids having a chain length from 8 to 24 carbon atoms, branched and/or linear hydrocarbons, waxes, Vaseline, paraffin oils, polyolefins, silicone oils, and esters of saturated, unsaturated and/or aromatic, branched and/or linear carboxylic acids having a chain length from 3 to 30 carbon atoms and saturated and/or unsaturated, branched and/or linear alcohols having a chain length from 3 to 30 carbon atoms.
10. A microemulsion according to any one of the preceding claims, characterized in that the microemulsion is a stable and transparent emulsion with an average particle size of less than 100 nm in its disperse phase.
11. A microemulsion according to any one of the preceding claims; characterized in that the microemulsion contains less than 0.5 % by weight of anionic surfactants of the sulfonate type and particularly less than 0.5 % by weight of fatty acid polyglycol ester sulfates, preferably no fatty acid polyglycol ester sulfates.
12. The use of the microemulsion according to any one of the preceding claims in cosmetic applications and/or the production of a medical product for medicinal-dermatologic applications.
13. The use of a the microemulsion according to any one of claims 1 to 11, wherein the emulsion contains the component (E.1) as a sunscreen.
14. The use according to claim 13 as a preparation for cleaning and treating the skin in the form of a foam applied by means of manually operated pump for dispensing foam without using propellants.

15. The use according to claim 13 or 14 as a cleaning and treating preparation, which contains more than 0 % by weight of the component (F) and can be rinsed off with water after application.
- 5 16. The use according to claim 13 to 15 as a cleaning and treating preparation for the skin and hair, particularly as a shower gel, which can be rinsed off with water after application.
- 10 17. The use of the microemulsion according to any one of claims 1 to 11 as an antidandruff shampoo, which contains the component (E.2) and preferably also contains more than 0 % by weight of the component (F).
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